

# Endo-Tracheal Tube (ETT) Fixation

Guidelines reviewed and completed by: Rachael Roberts Band 6  
Critical Care/NWTS Transport Nurse

# AUG 2019

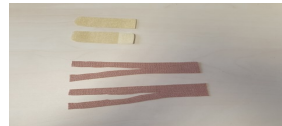
This guideline was produced after consideration of available evidence in conjunction with clinical expertise and experience. This guidance does not override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient.

## Method for securing Oral ETT (Melbourne Strapping method)

This is a 2 person procedure. Discuss sedation and muscle relaxant with medic prior to procedure and ensure emergency equipment available at all times.

Equipment Needed:

- 2 trouser legs of Elastoplast
- 2 pieces of duoderm
- scissors



- 1) Clean any secretions or debris from face and nose and then dry area. Document any existing marks or pressure areas seen. Apply Derma S (barrier crème) to cheeks.
- 2) Cut out 2 strips of duoderm and place on each cheek near to the corners of the mouth.
- 3) Cut 2 lengths of tape (longer rather than shorter) into trouser legs as shown.
- 4) Take the first trouser leg and secure the uncut side onto the cheek nearest the ETT. Secure the top trouser leg above and across the top lip and onto the opposite cheek.
- 5) Check ETT length and then wrap the bottom trouser leg around the ETT in a clockwise direction gradually up the ETT (with at least 2 rotations) and create a little fold at the very end. This improves security of the tube and the fold allows for easier removal when changing tapes. Remove any excess tape.
- 6) The 2nd trouser leg is applied to the opposite cheek in the same manner but this time the bottom trouser leg is secured under and across the bottom lip/chin and onto the other side.
- 7) The top trouser leg is applied above the top lip and then wrapped around the ETT in a clockwise direction again gradually up the ETT (with at least 2 rotations). Remove any excess tape.

## Method for securing Nasal ETT (Melbourne Strapping method)

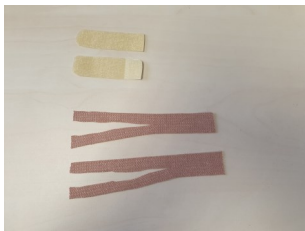
This is a 2 person procedure. Discuss sedation and muscle relaxant with medic prior to procedure and ensure emergency equipment available at all times.

Equipment Needed:

2 trouser legs of Elastoplast

2 pieces of duoderm

scissors



- 1) Clean any secretions or debris from face and nose and then dry area. Document any existing marks or pressure areas seen. Apply Derma S to cheeks.
- 2) Cut out 2 strips of duoderm and place on each cheek next to the nose.
- 3) Cut 2 lengths of tape (longer rather than shorter) into trouser legs as shown.
- 4) Take the first trouser leg and secure the uncut side onto the side opposite the ETT. Place the tape as close to the nose as possible. Secure the bottom trouser leg under the nose and across the top lip and onto the opposite cheek. Take care not to obstruct the nostrils.
- 5) Check ETT length and then take the upper trouser leg as high onto the bridge of the nose as allows and secure around the ETT in a clockwise or anticlockwise direction (depending on which nostril the tube is located) gradually up the ETT (with at least 2 rotations) and create a little fold at the very end. This improves security of the tube and the fold allows for easier removal when changing tapes. Remove any excess tape.
- 6) The 2nd trouser leg is applied to the opposite cheek in the same manner but this time the top trouser leg is secured over the bridge of the nose and across to the other cheek.
- 7) The bottom trouser leg is applied under the nose and around the ETT again gradually up the ETT (with at least 2 rotations). Remove any ex-

## References:

De Groot et al: Risk factors and outcomes after unplanned extubations on the ICU: A case control study. Critical Care 2011 (15):R19

Kanthimathinathan HK et al: Unplanned extubation in a paediatric intensive care unit: Prospective cohort study. Intensive Care Med 2015 (41): 1299-1306

Rachman B, Watson R, Woods N, Mink R: Reducing unplanned extubations in a paediatric intensive care unit: A systematic approach. International journal of paediatrics 2009

Roddy DJ et al: Unplanned extubations in children: Impact on hospital cost and length of stay. Pediatric Critical Care Med. July 2015 (16): 572-575